



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,907	02/28/2004	Ross Cutler	307055.01	7527
27662 7590 04/01/2008 MICROSOFT CORPORATION C/O LYON & HARR, LLP 300 ESPLANADE DRIVE SUITE 800 OXNARD, CA 93036			EXAMINER WEIDNER, TIMOTHY J	
			ART UNIT 2619	PAPER NUMBER
			MAIL DATE 04/01/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/788,907

Applicant(s)

CUTLER, ROSS

Examiner

Timothy J. Weidner

Art Unit

2619

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 24-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Information Disclosure Statement

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-22 and 24-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.
4. Regarding claims 2, 16-18, 25, and 26, the limitation "type" is not clearly defined in the specification, and is therefore given the broadest reasonable interpretation. The interpretation used in this office action includes the indication of "type" being whether the device transmits using audio or infrared.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 10-12, and 24- 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Balfanz et al. (US 2003/0149874 A1).

7. Regarding claims 1 and 24, Balfanz teaches first (discovering) and second (discoverable) wireless devices (figure 3, items 310, 320) connected to a main wireless link (same network) (figure 3, item 340), and connected via a location-limited channel (delimited space) (figure 3, item 330). Computer instructions are stored on a computer readable medium located in the first wireless device (paragraph 37) which performs the operations of transmitting a first commitment signal (request signal), and receiving a second commitment signal (reply signal), the second commitment signal including the address of the second wireless device (paragraph 48, lines 6-20). The first and second commitment signals are exchanged over the location-limited channel (not transmitted via the network) (paragraph 48, lines 6-20).

8. Further, regarding the signature signal of claim 1, Balfanz teaches a commitment signal transmitted in the location-limited manner may be a digital signature (paragraph 82, lines 9-11), whereby any number of back and forth communications between the first and second wireless devices may be performed (paragraph 48, lines 20-22).

9. Regarding claims 2, 25, and 26, Balfanz teaches the signals transmitted in the location-limited channel may be either audio or infrared (paragraph 41), and therefore the receiving device would necessarily know the type because the indication is the type of signal, whether audio or infrared, simply by having received the signal.

10. Regarding claim 3, Balfanz teaches the location-limited transmitter/receiver of the wireless devices are adapted for transmission and reception of sound (paragraph 41, lines 8-13), which inherently teaches the transmitter/receiver includes a microphone and

Art Unit: 2619

loudspeaker because there is no other way to transmit and receive analog sound between devices using analog sound as the location-limited channel.

11. Regarding claims 10 and 27, Balfanz teaches additional rounds of information may be exchanged over the location-limited channel (paragraph 48, lines 20-22).

12. Regarding claims 11, 12, and 28, Balfanz teaches the "commitment" portion of the commitment signal is a cryptographically-secure hash function (encrypted), which allows each wireless device to identify other devices (decrypted) (paragraph 46).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claims 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balfanz et al. (US 2003/0149874 A1), as applied to claim 3, in view of Tewfik et al. (US 6,061,793).

Art Unit: 2619

16. Regarding claims 4-9, Balfanz teaches using audio signals in the location-limited channel (paragraph 41, lines 8-13), but may not teach the signals are low-amplitude signals, either audible or inaudible to humans, embedded in the form of an audio watermark, or obtaining information from the audio watermark.

17. Tewfik, which is in the same field of endeavor, teaches the signals are low-amplitude audio signals inaudible to humans (column 2, lines 60-65, column 9, lines 1-15) or audible to humans (column 2, lines 39-51; "human-perceptible sounds"), and embedded in the form of an audio watermark (column 2, lines 39-51), and obtaining information from the audio watermark (column 7, lines 30-33) for the purpose of ensuring that the embedded data survives both legitimate and illegitimate data manipulation (column 2, lines 33-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the audio signals of Balfanz transmitted using low-amplitude audio signals, either audible or inaudible to humans, embedded in the form of an audio watermark, and recoverable at the receiving end to ensure that the embedded data survives both legitimate and illegitimate data manipulation.

18. Claims 13, 14, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balfanz et al. (US 2003/0149874 A1) as applied to claims 1 and 24.

19. Regarding claims 13, 14, and 29, Balfanz teaches an example wireless device may be a PDA among other devices (paragraph 37), but may not teach a confirmation actuator, or button, that must be activated before sending signals on the location-limited channel. Examiner takes Official Notice that a power on/off button is usually, if not

always, present on wireless devices for the purpose of conserving power. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the wireless devices of Balfanz include a power on/off button that must be activated before transmitting signals on the location-limited channel to conserve power.

20. Claims 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balfanz et al. (US 2003/0149874 A1).

21. Regarding claim 15, Balfanz teaches first (discovering) and second (discoverable) wireless devices (figure 3, items 310, 320) connected to a main wireless link (same network) (figure 3, item 340), and connected via a location-limited channel (delimited space) (figure 3, item 330). Computer instructions are stored on a computer readable medium located in the first wireless device (paragraph 37) which performs the operations of transmitting a first commitment signal (request signal), and receiving a second commitment signal (reply signal), the second commitment signal including the address of the second wireless device (paragraph 48, lines 6-20). The first and second commitment signals are exchanged over the location-limited channel (not transmitted via the network) (paragraph 48, lines 6-20).

22. Further, Balfanz teaches an example wireless device may be a PDA among other devices (paragraph 37), but may not teach a confirmation actuator, or button, that must be activated before sending signals on the location-limited channel. Examiner takes Official Notice that a power on/off button is usually, if not always, present on wireless devices for the purpose of conserving power. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the wireless

devices of Balfanz include a power on/off button that must be activated before transmitting signals on the location-limited channel to conserve power.

23. Regarding claims 16 and 17, Balfanz teaches the signals transmitted in the location-limited channel may be either audio or infrared (paragraph 41), and therefore the receiving device would necessarily know the type because the indication is the type of signal, whether audio or infrared, simply by having received the signal.

24. Regarding claim 18, Balfanz teaches the signature includes a "friendly name" (paragraph 82, line 11).

25. Regarding claims 19 and 20, Balfanz teaches using IR signals in the location-limited channel (paragraph 41, lines 13-20), via IR transmitter/receivers (figure 3, items 312, 322), whereby the location-limited channel extends within the perimeter of a conference room (paragraph 10, lines 13-15).

26. Regarding claim 21, Balfanz teaches additional rounds of information may be exchanged over the location-limited channel (paragraph 48, lines 20-22).

27. Regarding claim 22, Balfanz teaches the "commitment" portion of the commitment signal is a cryptographically-secure hash function (encrypted), which allows each wireless device to identify other devices (decrypted) (paragraph 46).

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cutler (US 2005/0018687 A1) and Conley et al. (US 2004/0215974 A1) teach similar systems using telephone lines as secondary channels to securely connect devices over a primary channel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Weidner whose telephone number is (571) 270-1825. The examiner can normally be reached on Monday - Friday, 8:00 AM - 5:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy J Weidner/
Examiner, Art Unit 2619

/CHAU T. NGUYEN/
Supervisory Patent Examiner, Art Unit 2619